

Work Order ID 68790

Thursday, April 21, 2011 8:13:01 AM



Page 1

Item ID: D3220-042

Accept



Setup Start



Revision ID:

Stop



Item Name: Doubler Assembly

Start Date: 4/20/2011 Start Qty: 4.00



Cust Item ID:

Required Date: 4/25/2011 Req'd Qty: 4.00



Customer:

Reference:

Approvals:

Process Plan:

[Signature]

Date:

4-21-11

Tooling:

Date:

QC:

Date:

SPC (Y/N):

Date:

Run Start



Stop



Sequence ID/
Work Center ID

Operation
Description

Set Up/
Run Hours

Tool ID

Tool #

Plan
Code

Accept
Qty

Reject
Qty

Reject
Number

Insp.
Stamp

Draw Nbr

Revision Nbr

D3220

B

100

0.00



FLOW WATER JET

Waterjet

Memo

0.00

FLOW CNC Waterjet

1-Cut D3220-2 as per Dwg D3220

Dwg Rev: _____

Prog Rev: _____

2-Deburr if necessary

HB 11-5-4

(4)

110

0.00



QC2- Inspect parts off machine FAI/FAIB

QC

Memo

0.00

Quality Control

HB 11-5-4

W/O:		WORK ORDER CHANGES						
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector	

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

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DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

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Approvals: Process Plan: _____ Date: _____ Tooling: _____ Date: _____

Run Start

QC: _____ Date: _____ SPC (Y/N): _____ Date: _____

Stop

Sequence ID/
Work Center IDOperation
DescriptionSet Up/
Run Hours

Tool ID

Tool #

Plan
CodeAccept
QtyReject
QtyReject
NumberInsp.
Stamp

120

QC8- Inspect parts - second check

0.00



QC

Memo

0.00

Quality Control

130

Small Fab

0.00



Small Fab

Memo

0.00

Small Fab

1-Deburr

2-C'sink D3220-2 as per Dwg D3220

140

QC5- Inspect part completeness to step on W/O

0.00



QC

Memo

0.00

Quality Control

Sullosky

44

4/24/05/04 4

44

-042

W/O:		WORK ORDER CHANGES						
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Page 3

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Cust Item ID:

Required Date: 4/25/2011 Req'd Qty: 4.00



Customer:

Reference:

Run Start



Approvals: Process Plan: _____ Date: _____ Tooling: _____ Date: _____

QC: _____ Date: _____ SPC (Y/N): _____ Date: _____

Stop

Sequence ID/
Work Center IDOperation
DescriptionSet Up/
Run Hours

Tool ID

Tool #

Plan
CodeAccept
QtyReject
QtyReject
NumberInsp.
Stamp

150



HandFinish

Chemical Conversion Coat per QS1005 4.1

0.00

Memo

0.00

Hand Finishing

4 0 11 11/05/06

160



QC

QC3- Inspect Part Finish

0.00

Memo

0.00

Quality Control

=)

(4X) 0 m.f 11/05/06

170



Small Fab

Small Fab

0.00

Memo

0.00

Small Fab

Assemble D3220-042 doubler as per Dwg D3220

5/5/05/09 (4)

W/O:		WORK ORDER CHANGES						
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Page 4

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Start Date: 4/20/2011 Start Qty: 4.00



Cust Item ID:

Required Date: 4/25/2011 Req'd Qty: 4.00



Customer:

Reference:

Approvals: Process Plan: _____ Date: _____ Tooling: _____ Date: _____

Run Start



QC: _____ Date: _____ SPC (Y/N): _____ Date: _____

Stop

Sequence ID/
Work Center IDOperation
DescriptionSet Up/
Run Hours

Tool ID

Tool #

Plan
CodeAccept
QtyReject
QtyReject
NumberInsp.
Stamp

180

QC5- Inspect part completeness to step on W/O

0.00



QC

Memo

0.00 8 11/05/09

Quality Control

x4

-042

190

Identify as per dwg & Stock Location: 179

0.00



Packaging

Memo

0.00

Packaging

11/5/9

SPC

200

QC21- Final Inspection - Work Order Release

0.00



QC

Memo

0.00

Quality Control

11/5/9

ME
11-05-09

W/O:		WORK ORDER CHANGES						
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NOTE: Date & initial all entries

Picklist Print

Thursday, April 21, 2011 8:13:07 AM

Page 1

Work Order ID: 68790

Parent Item: D3220-042

Parent Item Name: Doubler Assembly




Start Date: 4/20/2011

Required Date: 4/25/2011

Start Qty: 4.00

Required Qty: 4.00

Comments: IPP Rev:A New Issue 05-11-06 JLM
IPP: B 06.11.15 waterjet EC

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status
M2024T3S.050  2024-T3 .050 sheet		Purchased	No			100	sf	23.6488	0.6926	2.916211			
				<u>Location</u>		<u>Loc Qty</u>		<u>Loc Code</u>					
				MAT22		23.648842							
				114968		23.648842							
MS20426AD3-3  Rivet		Purchased	No			170	Each	2,867.000	8	32			
				<u>Location</u>		<u>Loc Qty</u>		<u>Loc Code</u>					
				ST316		2867							
				19099		2867							
MS21059L4  Nutplate		Purchased	No			170	Each	46.0000	4	16			
				<u>Location</u>		<u>Loc Qty</u>		<u>Loc Code</u>					
				ST302		46							
				116582		46							

B11-5-4

114968

32

32

16

11/5/68

16

(4)

(4)

W/O:		WORK ORDER CHANGES						
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector	

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

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			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

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Item	Qty -041	Qty -042	Part Number	Description
1	X		D3220-041	DOUBLER ASSEMBLY
2		X	D3220-042	DOUBLER ASSEMBLY
3	1		D3220-1	DOUBLER
4		1	D3220-2	DOUBLER
5	4	4	MS21059L4	NUTPLATE
6	8	8	MS20426AD3-3	RIVET


 MS21059L4 NUTPLATE
 MS20426AD3-3 RIVET, 2X
 4 PL

SHOP COPY
 RETURN TO
 ENGINEERING
 UNCONTROLLED COPY
 SUBJECT TO AMENDMENT
 WITHOUT NOTICE
 WORK ORDER
 NO. 68790
2/17-04-21

RELEASED
 2009-09-09
M

D3220-041 DOUBLER ASSEMBLY (SHOWN WITH D3220-1 DOUBLER)
D3220-042 (OPPOSITE)

NOTES:

- 1) MATERIAL: N/A
- 2) FINISH: N/A
- 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
- 6) IDENTIFICATION: IDENTIFY WITH DART P/N "D3220-04X" USING FINE POINT PERMANENT INK MARKER
- 7) WEIGHT: D3220-041 = 0.53 lbs
D3220-042 = 0.53 lbs

B	DRAWING UPDATED TO CURRENT STANDARDS. Ø0.316 WAS Ø0.323 (ZN C8-2, B4-3); MS20426AD3-3 WAS MS20426AD3-4 (ZN D4-1); CORRECT TYPO NOTE 1 (ZN A8-2, A8-3); REF PAR 09-025	RF	09.07.08
A	NEW ISSUE	CP	03.10.16
REV.	DESCRIPTION	BY	DATE
DESIGN	DS		
DRAWN	RF		
CHECKED	<i>[Signature]</i>		
MFG. APPR.	<i>[Signature]</i>		
APPROVED	<i>[Signature]</i>		
DE APPR.	<i>[Signature]</i>		
DATE	09.07.08		

DART AEROSPACE LTD
 HAWKESBURY, ONTARIO, CANADA

DRAWING NO. D3220
 TITLE DOUBLER
 REV. B SHEET 1 OF 4
 SCALE NTS

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W/O:		WORK ORDER CHANGES						
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DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

8 7 6 5 4 3 2 1

D

C

B

Ø0.098
CSK Ø0.180x100°
NEAR SIDE, 8 PL

B
Ø0.316
TYP, 4 PL

GRAIN
DIRECTION

0.500 TYP

1.000 TYP

R0.50
TYP

1.50

1.000

7.00

14.25

7.000

5.50

81-2
SEE DETAIL A
TYP

100°
REF

0.050
REF

DETAIL A
SCALE 5X

D3220-1 DOUBLER

B

NOTES:

- 1) MATERIAL: 2024-T3 ALUMINUM SHEET, 0.050 THICK
REF DART SPEC. M2024T3S.050
- 2) FINISH: CHEMICAL CONVERSION COAT PER DART QSI 005 4.1
- 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
- 6) IDENTIFICATION: IDENTIFY WITH DART P/N "D3220-1" USING REMOVABLE TAG
- 7) WEIGHT: 0.50 lbs

RELEASED
2009-09-08

DESIGN	DS	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA	
DRAWN	RF		
CHECKED		DRAWING NO.	REV. B
MFG. APPR.		D3220	SHEET 2 OF 4
APPROVED		TITLE	SCALE
DE APPR.		DOUBLER	NTS
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8 7 6 5 4 3 2 1

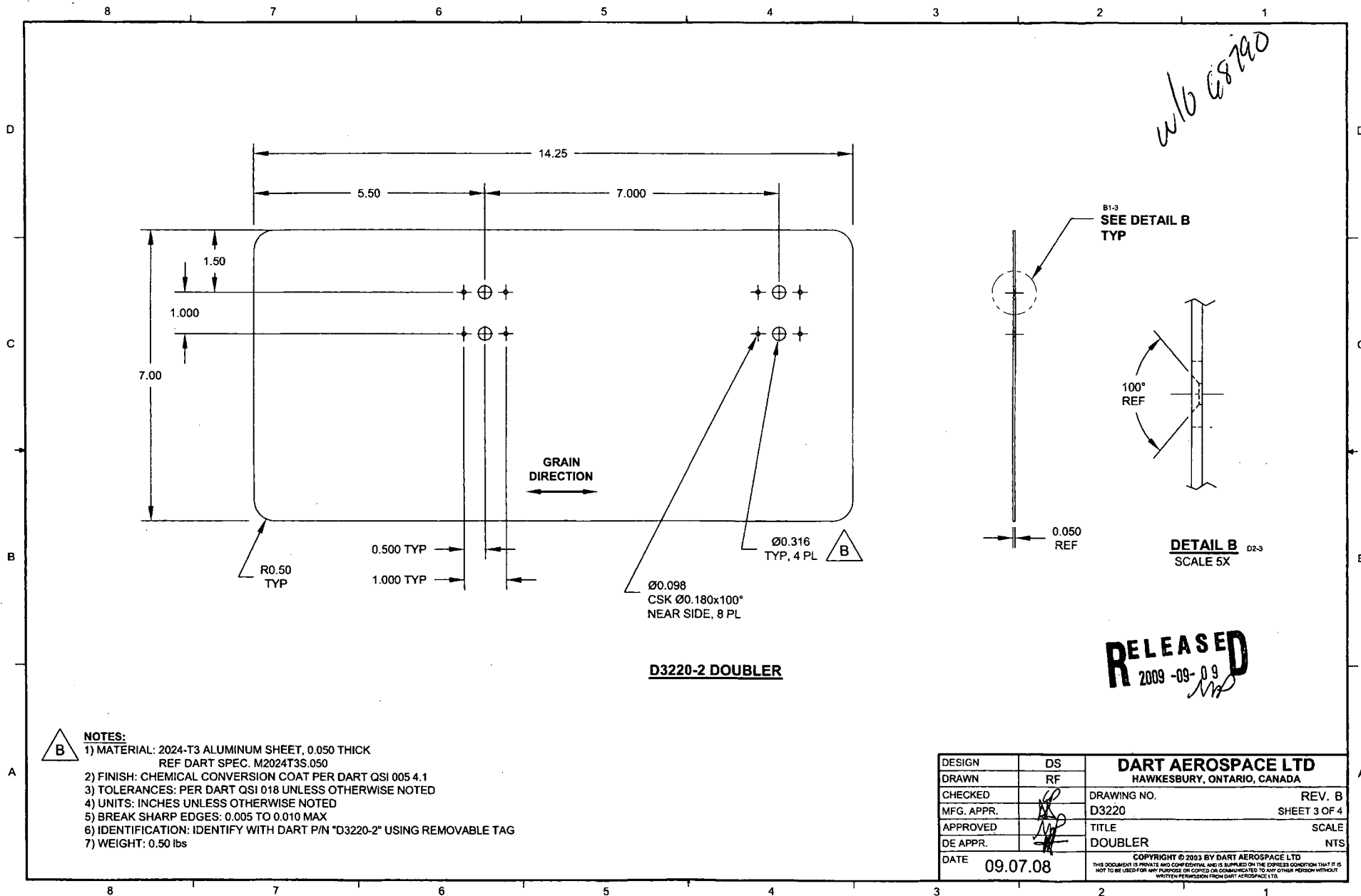
W/O:		WORK ORDER CHANGES						
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Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

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NOTE: Date & initial all entries



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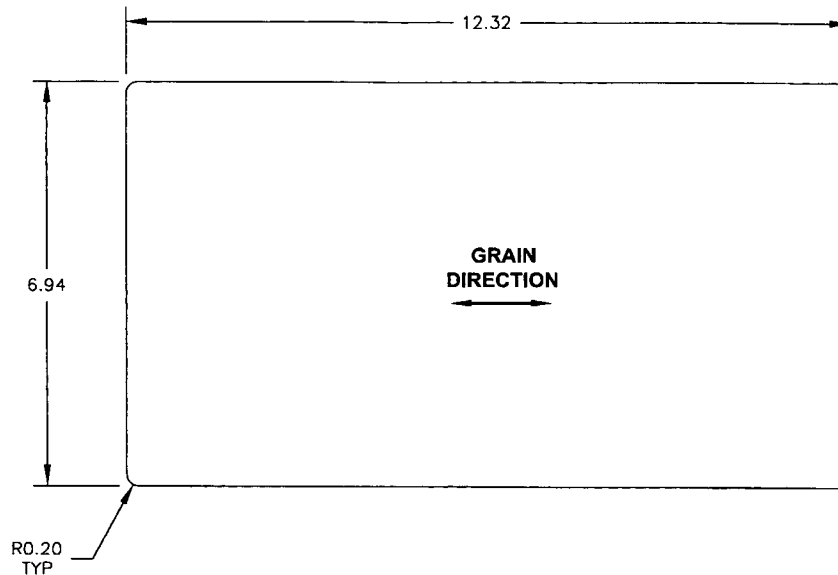
Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

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DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

w/o 15790



D3220-3 DOUBLER

RELEASED
2009-09-09
[Signature]

NOTES:

- 1) MATERIAL: 2024-T3 ALUMINUM SHEET, 0.050 THICK
REF DART SPEC. M2024T3S.050
- 2) FINISH: CHEMICAL CONVERSION COAT PER DART QSI 005 4.1
- 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
- 6) IDENTIFICATION: IDENTIFY WITH DART P/N "D3220-3" USING FINE POINT PERMANENT INK MARKER
- 7) WEIGHT: 0.43 lbs

DESIGN	DS	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA	
DRAWN	RF		
CHECKED	<i>[Signature]</i>	DRAWING NO.	REV. B
MFG. APPR.	<i>[Signature]</i>	D3220	SHEET 4 OF 4
APPROVED	<i>[Signature]</i>	TITLE	SCALE
DE APPR.	<i>[Signature]</i>	DOUBLER	NTS
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